CITY OF HILLIARD est. 1853
Don Schonhardt, Mayor
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STORM WATER UTILITY

2011 ANNUAL REPORT

From January 1, 2011 to December 30, 2011

Background

ORDINANCE No. 09-63, Passed 12/21/2009, Effective 1/21/2010

CREATING A STORMWATER MANAGEMENT UTILITY; ESTABLISHING A STORMWATER MANAGEMENT SERVICE CHARGE TO BE PAID BY USERS BASED ON AN EQUIVALENT RESIDENTIAL UNIT (ERU); INCLUDING THE MONTHLY ERU SERVICE CHARGE IN CHAPTER 190 OF THE CITY'S CODIFIED ORDINANCES; ADOPTING SECTION 951 OF THE CITY'S CODIFIED ORDINANCES TITLED "STORMWATER MANAGEMENT CODE"; AND CREATING A SPECIAL FUND FOR THE DEPOSIT AND USE OF ALL SERVICE CHARGES.

Amended by:
ORDINANCE 10-14, Passed 3/22/2010, Effective 3/22/2010
AMENDING CHAPTER 951 "STORMWATER MANAGEMENT CODE" OF THE CITY'S CODIFIED ORDINANCES, AND DECLARING AN EMERGENCY.

§ 951.17 ANNUAL REVIEW OF CHARGES.

Every year after the effective date identified in Section 951.16(C), the Director shall prepare a report with recommended Stormwater Management Service Charges. This report shall contain data used in the determination of the recommended Stormwater Management Service Charges and shall be presented to City Council for referral to the appropriate Council committee. The committee shall make a recommendation to City Council on or before the fourth Monday in October concerning the Stormwater Management Service Charge to be in effect during the next calendar year.

§ 945.18 CREDITS.

(A) The Director shall promulgate rules and regulations which allow for a credit in the Stormwater Management Service Charge, and to design a credit application, for properties other than single-family residential properties. These rules and regulations may allow, where appropriate, application of the credits retroactive to the effective date of this Chapter. The Director shall have the authority to charge a Stormwater Management Service Charge credit application fee, which shall be based upon the estimated costs of reviewing, processing and administering the credit application, which fee shall be included in the rules and regulations promulgated. A Credit Program was established in August of 2010. No credits have been applied for to date.

Stormwater Management

Stormwater management systems represent valuable public assets that provide a number of benefits to many users by controlling floodwaters and preventing pollutants from reaching our rivers and lakes. Stormwater management systems can protect the health and safety of the public and the environment. In doing so, clean and healthy water resources support public drinking water supplies and can attract local investment through increased land values.

Funding

A stormwater rate is a funding mechanism that has been successfully implemented throughout the United States. The goal of the rate study is and was to develop and implement an equitable, self-supporting, and dedicated funding source for stormwater management in Hilliard.

Monthly user fees were introduced when the Storm Water Utility was established in 2009 by Ordinance 09-63 and subsequently modified by Resolution 10-14. These fees cover the operations, maintenance and replacement costs of the existing storm water management system and construction of new storm drainage and flood management facilities. In creating the utility, the City declared its intention to impose just and equitable charges on storm water drainage utility users. Impervious surface area plays the single largest role in determining the amount of storm water runoff from a property. Impervious area leads directly to storm water runoff. All single-family residential properties are proposed to be defined as being equal to each other, and form the basis for all other comparisons.

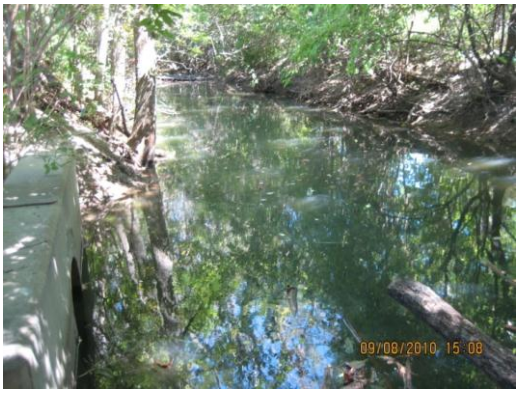
The typical single-family residential property for the City of Hilliard contains 2,000 square feet of impervious surface area. Therefore, all single-family residential properties will have an equivalent residential unit (ERU) rating of 1.0. An example of a non-residential property with 30,000 square feet of impervious surface area would have an ERU rating of 15.0.

2010-2011 SWU Rates projected revenues				
Estimated ERU's	23,339	$ 1.95	2,000	**$ 546,200**
Residential units	7,860	$ 1.95	1	$ 184,000
Commercial units	15,479	$ 1.95	2,000	$ 362,200

2012 SWU Rates projected revenues				
Estimated ERU's	**25,284**	$ 1.95	2,000	**$ 591,700**
Residential units	8,152	$ 1.95	1	$ 190,800
Commercial units	17,132	$ 1.95	2,000	$ 400,900
2012 SWU Rates projected revenues – non central sewer accounts				
Estimated ERU's	**641**	$ 1.95	2,000	**$ 15,000**
Residential units	61	$ 1.95	1	$ 1,430
Commercial units	580	$ 1.95	2,000	$ 13,570
TOTAL REVENUES	**26,925**			**$ 606,700**

Typical Causes of Stormwater Problems

Urbanization: Growth and development alters the amount of runoff and pollution discharged into the system.



Aging Infrastructure: Pipes, culverts and inlets have a limited life expectancy and must be repaired or replaced.

Design standards: Regulatory requirements are always changing such that systems designed to previous criteria may be inadequate with respect to current standards.

Inadequate planning: Problems will result if programs do not proactively plan the appropriate resources, measures, and improvement projects to address needs and problems,

Inadequate maintenance: problems will also result if programs do not actively operate facilities, maintain watercourses, sweep streets, collecting debris, etc.

Poor design or faulty construction: Developer plans must be properly reviewed and sites must be adequately inspected during construction to minimize the potential for problems.

Types of Stormwater Problems

Flooding

Flooding is the most visible of stormwater problems. Serious flooding presents a threat to public safety and can damage public and private property, disrupt business, and hamper our everyday activities.

Erosion

Water traveling quickly over an unprotected surface will cause that surface to erode. Controlling the movement of stormwater is important to prevent the erosion of stream banks, hill slopes and even structures.

Water Quality

Road salt, chemical spills, eroded sediments and organic debris can pollute watercourses. Stormwater management systems can protect water quality if facilities are properly planned, designed, operated and maintained.

Pollution

Water carries with it anything it can and deposits material when things get in the way. This can cause a build up of debris that blocks water getting through and may cause flooding problems as a result.

Hilliard's Stormwater Management Program

To address stormwater management, the City's program includes:

- Operation and maintenance of facilities;
- Rehabilitation, renewal, retrofit, and/or upgrade of facilities;
- Design, permitting, construction, and inspection of new City capital improvement projects;
- Emergency response, recovery, and clean-up for flooding events and water quality violations;
- Engineering and support services for review and regulation of proposed development site plans, inspection, monitoring, and environmental compliance programs;
- Support for public education and community involvement programs; and
- Administration, staffing, computer resources, equipment, etc.

Operation and Maintenance

Maintaining existing facilities is a significant part of the Stormwater Utility budget. This vital task includes street cleaning; inspection and maintenance of ponds; inspection cleaning, and repair of catch basins, manholes, pipes, outfalls, ditches, channels, bridges, etc.

Storm Sewers
City crews removed debris, performed root cutting, and cleaned full-length runs of sewer lines at 31 manhole locations in 2011. Sewer camera inspections were performed at 9 routine camera locations and as prompted by emergency calls.

Street Sweeping
City crews swept every street in quadrant of the City three times and swept the City's main arterial streets five times during 2011. Street sweeping efforts were increased during special events and prior to holiday weekends. Efforts also included sweeping all City-owned parking lots and associated paved areas four times during 2011. Staff is continuing to refine street sweeping routes and services areas. A new street sweeper unit was added to the City's fleet in 2011.

Leaf Collection Program
City crews collected leaves in all four quadrants of the City on four different occasions and collected in high generating areas at least eight times during the 2011 leaf collection season. The leaf collection program was completed on December 15th as scheduled. Crews continued using improved dump site for the 2011 season to reduce dump times and thereby increased productivity, ease maneuverability, and increased safety for City crews. Crews are currently operating the leaf collection program with 4 leaf collection units. Prior to 2010 the City had operated the program with only 3 leaf collection units. Resident notification process continued for the 2011 leaf collection season. Residents were notified of upcoming leaf collection schedules by weekly news releases to the City website and other local media. Calls concerning missed collections and other related issues were minimal in 2011.

Chipper Service and Brush Collection Program
The City's chipper and brush collection services were continued in 2011. The annual citywide collection program occurred from April to December. Two existing dump trucks previously outfitted with larger capacity chipper boxes continued to operate with increased efficiency and production.

Capital Improvement Projects

Completed 2011 Capital Improvements:

***ST- 32 – Storm Water Management (NPDES Phase 2) Program**
2011 – NPDES Professional Services - $70,600.

***ST- 37 – Pedestrian Bridge over Stream at Hilliard Family Aquatic Center**
2011 – Design and construction - $103,000. - **Completed**
Currently on hold

***ST-40 – Center & Wayne Street Storm Sewer Improvement**
2011 – Design of Improvements - $24,000 – **Completed**
2012 – Construction - $ 160,000 (estimate)

The 2012-2016 Capital Improvement Program and the 2012 Capital Improvement Budget (CIB) was adopted by City Council on January 9, 2012 by Ordinance 11-53. The projects below are contained in the 2011-2015 CIP. Those budgeted as part of the 2012 CIB are noted with an asterisks in front of the CIP number (e.g. *ST-32).

***ST- 27 – Detention & Retention Basin Rehabilitation Program**
2012 - Hayden Run Village Park & Westbriar subdivision retention basins - $159.400.

***ST- 32 – Storm Water Management (NPDES Phase 2) Program**
2011 – NPDES Professional Services - $60,000. – F**unds will be encumbered for 2012 contract during 2nd quarter.**

ST- 34 – Hilliard Storm Water Utility Plan
2013 – Update of plan Professional Services - $20,000

***ST-38 – Stream Restorations and Water Quality Improvements**

2011**-12** - Hamilton Ditch Stream Restoration Project $1,484,578. A OPWC Clean Water Grant of $684,578 with a developer contribution of $720,000 with only **$80,000** in local match from the Storm Water Utility Funds. – **Design is at 80% and Army Corp Permits and Flood Plain permits in application phase. A minor redesign will be required as part of comments from the ACE review by Ohio Department of Natural Resources. Construction phase is now anticipated in spring and summer of 2012.**

ST-39 – Wilcox Road - Riggins Road - Storm Sewer Improvements

20115-16 - This project provides for Drainage improvements necessary for the Wilcox Road-Riggins Road roundabout improvement - $12,000 for design in 2015 and $66,000 for construction in 2016.

***ST-40 – Center & Wayne Street Storm Sewer Improvement – funded by 2011 CIB**

2011 – Design of Improvements - $24,050 – **Completed**

2012 – Construction - $95,000

***ST-41 – Cosgray Road (CR3) bridge over the Clover Groff Ditch**

Design is underway this project will require an individual Army Corp of Engineers Permit.

2012 – Right-of-way and Utility relocation $25,000

2013 – Construction City portion only $809,000 – Joint project with the Franklin County Engineer.

Engineering and Support Service

The Engineering Division of the City will help the utility save time and money. Having qualified staff available to answer questions is critical to the success of the utility. The City will continue to work with Franklin County Soil and Water Conservation District (FSCWD) and the Franklin County Drainage Engineer (FCDE) to comply with the federal and state mandates for the City's NPDES Storm Water Permit. This Division also maintains our storm sewer GIS mapping.

City mapping aided in the identification of 76 missed storm water utility properties. These properties were not billed as part of City of Columbus' Water billing since they are served by central sewer. This will generate additional revenues in 2012 in the amount of $15,000+/-.

Emergency Response

The City has been fortunate in the past few years of having only one known hazardous spill. The Ohio EPA was contacted and responded very quickly. When the City receives an inquiry by a resident, it is investigated and all actions are documented for the annual report to the Ohio EPA as required by the City's NPDES Permit and the City's Findings and orders with the Ohio EPA. The Franklin County Sheriff's Department has an Environmental Sheriff who can be called to write citations, if necessary. During periods of moderate to heavy rainfall, the City's maintenance crews respond to calls of standing or slowly receding water.

City crews responded to the following number of storm water related service requests in 2011:

38 – Storm Sewer Issues

20 – Poor Drainage or Flooding Concern

4 – Erosion or Bank Stability

Public Involvement Programs

The annual Household Hazardous Waste (HHW) collection sponsored by the Solid Waste Authority of Central Ohio (SWACO) is vital to keeping our streams and creeks free of pollutants. Thousands of pounds of various wastes are collected. Without this program, a lot of these pollutants would end up in our storm sewers and/or our waterways. The City has sponsored or supported the *Community Clean-Up Week* each year in May or Jun. this program collects all types of wastes including volunteers picking up trash along our roadways and parks. The FSWCD is usually present to distribute information. They also help with the education of our school children, as required by the City's NPDES Permit.

NPDES Phase II Storm Water Master Plan
Staff continued to bring City toward goal of improving storm water quality and quantity. Public outreach and education continued as the program focus in 2011. A news article was released in autumn of 2011 to educate residents on fall clean-up guidelines. Staff created and maintained several pages on the City's website to increase awareness and effectiveness of the current storm water management program. The City provided a tree education session and field exercise to students at Hilliard Tharp Sixth Grade Middle School on Arbor Day. Staff worked with a consultant to develop formalized Hilliard Storm Water Management Plan (SWMP) and Hilliard Service Center Facility Storm Water Pollution Prevention Plan (SWPPP). The City's Operations Division staff were trained and focused on good housekeeping practices at the Hilliard Service Center in 2011. Noteworthy efforts were made in improving the general appearance of the Hilliard Service Center in 2011. A public meeting and City Council briefing are to be scheduled in early 2012.

Administration and Enforcement

The City's engineering and construction inspection staff inspect all active construction sites to ensure that all temporary soil erosion and sediment control measures designed for the project are in place and functioning properly. Though construction is down because of the economy, there are many sites that must be inspected on a regular basis to insure the owners are in compliance with their Ohio EPA issued permits. In 2011, the City conducted bi-weekly temporary soil erosion and sediment control inspections on twelve (12) construction sites throughout the City. Seven (7) of these twelve (12) sites had earth disturbing activities over one (1) acre, and thus had to obtain a General Storm Water Permit from the Ohio EPA. Two (2) of these seven (7) sites are located in the Big Darby Creek watershed, and thus had to obtain the Ohio EPA's General Storm Water Permit for the Big Darby Creek watershed. Two (2) notices of violations were issued as a result of the bi-weekly inspections with both being promptly resolved.

Current and Future Status of Stormwater Fund

Year to date revenues: $770,895 through December 31, 2011.

Total Funds expended year to date: $159,139 for operation expenses with $250,000 budgeted in 2011. $139,579 is encumbered for various capital expenses including the HFAC. The end of year unencumbered fund balance is $518,372.

The 2011 revenues were higher just under $60,000 more than anticipated and includes makeup dollars that were part of the implementation billing error in 2010. By the end of 2011 all billings should be current and Hilliard will have realized the revenues anticipated by the current rate structure. Total

estimated revenue in 2011, was $711,300 made up of $546,200 normal billings plus the amounts due from 2010 under billings of $167,000.

OTHER FUNDS:

AWARDED A CLEAN OHIO GRANT THRU OPWC - HAMILTON DITCH (CIP ST-38) - $684,578

DEVELOPER FUNDS - HAMILTON DITCH - $720,000

PROFORMA TABLES:

Table includes a 50 ERU increase per year and a $0.05 increase every two years 2013-2015.

	2012			2013		
	ERU	**RATE**	**TOTAL**	**ERU**	**RATE**	**TOTAL**
	26,925	$ 1.95	$ 606,700	26,975	$ 2.00	$ 647,400
OPERATIONS		82%	$ 499,515		70%	$ 453,180
CAPTIAL		18%	$ 107,185#		30%	$ 194,220
	2014			**2015**		
	ERU	**RATE**	**TOTAL**	**ERU**	**RATE**	TOTAL
	27,125	$ 2.00	$ 651,000	27,175	$ 2.05	$ 668,505
OPERATIONS		60%	$ 390,600		60%	$ 401,100
CAPTIAL		40%	$ 260,400		40%	$ 267,405

 # DOES NOT INCLUDE CARRYOVER BALANCE THAT IS PART OF CIB

Implementation and Recommendation

Hilliard's Storm Water Utility continues to diligently and properly operate and maintain the City's storm water facilities. The Department of Public Service has been expending a tremendous amount of effort to comply with the Ohio EPA's NPDES Phase II permit requirements. Despite this effort, there are several locations around the City of Hilliard that require maintenance that is "outside" the capabilities our Department.

The City has been providing funds for the NPDES Permit Program as follows:

- 2005 - $75,000;
- 2006 - $100,000;
- 2007 - $60,000;
- 2008 - $60,000;
- 2009 - $54,000,
- 2010 - $60,000.
- 2011 - $67,250; and
- 2012 - $60,000 budgeted

These projects require major construction and personnel who specialize in construction activities so that we are able to stay in compliance with our NPDES permit. Identification of such projects is our first step. Developing these storm water projects into a practical and adequately funded Capital Improvement Program (CIP) is crucial for the City.

To properly develop this CIP, we will be continually evaluating the condition, capacity, and demand on our storm water system in order to maintain our system, and establish a priority of projects that allows the City to minimize its expenditures while using outside funding sources.

Our evaluation includes open water ways, underground pipes, ditches, and other storm water conveying infrastructure. With this evaluation we will be able to determine what projects will provide maximum benefit for the dollar. We will also be able to determine when such projects should be undertaken to minimize damage as a result of the condition of the existing storm water facilities. We must also decide how the projects identified and/or desired through our evaluation can be funded, by either the collection of fees, grants, or possibly through assessments.

A RATE INCREASE IS NOT BEING RECOMMENDED AT THIS TIME.

CITY OF HILLIARD

STORM WATER UTILITY FACTS

WHAT SHOULD I KNOW ABOUT DRAINAGE AROUND MY PROPERTY AND BEYOND?

The first step a resident can take is to understand the drainage pattern established for each individual lot and its function as part of the overall storm water runoff plan for the subdivision. The grading plan for your home site was established by professional engineers in order to provide drainage away from the house and other buildings. Therefore, through a simple visual assessment, residents can determine If the rainwater runoff drains away from the home and ultimately off of the lot.

Gutters should be kept clean and well-aligned to catch rain water run-off from the roof. Make sure seams are well-caulked and do not drip water. Downspouts should be unblocked and positioned to direct water away from the house foundation. A good time to check the system is during a heavy shower. Problems will present themselves. In many cases, wet basements and crawl spaces are caused by roof drains not being properly directed away from the house.

Once the rainwater falls and drains from each individual lot, it enters some type of storm water collection and distribution system. This can include swales and ditches, catch basins and pipes, detention and retention ponds, ravines and streams, etc. Therefore, it Is very important that awareness of the existing drainage patterns is established and changes to these patterns (landscaping, sheds, fences, etc.) must maintain proper positive drainage and be approved by the City. It is very common for new homeowners to fill in the swales (shallow "valleys" between houses, usually on property lines) with topsoil to "level off' their yards and make it easier to mow. They often do not realize these swales are a critical part of their yard's drainage design. If your yard swale design has been altered, it is a good Idea to restore your swales to assist In proper yard drainage.

Streams and ravines are also a very critical part of storm water drainage systems. They typically convey large volumes of water for large drainage areas. Therefore, it is very important that they are allowed to flow unrestricted. A resident can be of assistance to the City by reporting any blockages to the stream flow upon observation of a potential problem. Streams can suffer severe bank erosion at a bend with the result that a home or other structure is in danger of being undermined and potentially destroyed. If the stream is located on private property and has no storm water easement, then the property owner is responsible to correct the problem. An engineer should be contacted to assess the condition of the endangered building and recommend possible remedies to the situation.
The City of Hilliard is here to help you with storm water issues. We hope this information will help answer some of your questions. Please feel free to call the Service Department at (614) 876-7361 ext. 799 if you need further information.

WHAT IS A STORMWATER UTILITY?

A storm water utility is the same idea as the existing water and sanitary sewer utilities. It is a way of collecting proprietary funds, which can only be spent to maintain the infrastructure for which they were collected. Simply stated, the City is not permitted to spend the money received from the storm water utility on anything unrelated to storm water Infrastructure and improved drainage.

WHY DO WE NEED A STORMWATER UTILITY?

To stay effective, storm water infrastructure needs maintained and updated the same as our roads, water lines and sanitary sewer lines. It is the City's desire to develop a strong storm water program that will aid In protecting properties and creating a safe, healthy environment for the residents of Hilliard. Additionally, state and federal regulations now require a more stringent comprehensive approach to storm water management. The storm water utility will enable the City to meet these requirements on storm water quality and to meet the City's federally mandated but unfunded responsibilities to manage the storm water drainage system more closely, study the contents of the storm water, seek out and eliminate illicit connections and illegal dumping, and educate the public on flood plain and storm water issues. For Hilliard to be successful In meeting storm water management demands, a funding source was needed, which will direct funds specifically to this cause.

How IS AN ERU CALCULATED?

First, the impervious area of several Hilliard homes was calculated and the average area of impervious surface per residential property was found to be 2,000 square feet. Therefore, 2,000 square feet represents the Impervious area of one ERU. Next, the actual Impervious square footage was measured on each non-residential property. Each non-residential property's total square footage was then divided by 2,000, square feet (one ERU) to determine how many ERU's for which each non-residential property was generating storm runoff. All ERU's were added together (residential and non-residential) and the grand total of ERU's In the City of Hilliard approximately 23,000. The next step in the process required that City officials produce a five-year projection of storm water projects, personnel and equipment needed to maintain and improve Hilliard's drainage and comply with state and federal requirements. The annual revenue needed was divided by the total number of ERU's to determine the quarterly storm water utility charge per ERU.

WHAT WILL I PAY?

For 2012, the monthly charge for one ERU is $1.95 per month per ERU ($23.40 annually). Commercial customers will pay $1.95 per month times the number of ERU's related to their property.

CREDIT PROGRAMS:
Commercial customers may receive a credit for efforts to minimize the Impact their property has on the City's storm water system. A set of rules and regulations as required have been promulgated and are available at the Public Service Department or online at the city website. http://hilliardohio.gov/ .

WHAT WILL THE STORMWATER UTILITY DO FOR THE RESIDENTS OF HILLIARD?
Storm Water Infrastructure will receive improved routine maintenance, which will allow the storm water system to convey runoff as effectively as possible. The City will have the resources needed to take a more proactive approach toward preventing storm water emergencies by making necessary repairs before there is a failure in the system. This can include street sweeping and leaf pickup programs, keeping pipes clean, inlets open, outlets unclogged, streams and ditches unobstructed, etc. An initial five-year capital improvement plan for upgrading existing systems and Installing new systems where needed has been developed, and more projects will likely be identified in the future. Maintenance of these systems will be an ongoing need.

WHERE DO I CALL WITH QUESTIONS?
Call the Hilliard Service Department at (614) 876-7361 ext 799 or on the web at http://hilliardohio.gov/ . Under Resources click on Service Request Center or go this directly using the following link. http://hilliardohio.gov/resources/request.aspx .